

is no consistent evidence for smaller relative inequalities in health between social groups within countries in northern Europe, despite their long history of egalitarian policies.⁷ It has been suggested that a reasonable level of social security and income redistribution are necessary conditions to reduce inequalities in health, but not sufficient.⁸ Lifestyle factors, such as strong social gradients in smoking, could contribute substantially to relative inequalities in mortality in the northern region.^{7,9}

Universal welfare programmes and redistributive policies have traditionally been promoted by the labour movement and the political left, and for reasons that reach beyond health. At least in the Nordic countries, such policies have been as much about dignity and solidarity. Targeting of “the truly needy” may seem economically attractive, but implies stigmatisation and “more tests of the poor”. Furthermore, economic research shows that universal welfare programmes might be more effective in achieving sustained alleviation of poverty because such programmes are more likely to retain political support among voters.¹⁰ Several surveys show that the Nordic countries score high on indicators of social capital, especially generalised trust.⁹ Economists seem puzzled by the fact that economies with high levels of taxation and a strong public sector do work quite dynamically: “the bumble bee can fly”. There is already renewed interest within several disciplines in aspects of Nordic welfare models and Lundberg and colleagues’ paper will probably encourage this approach.

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I chair a National expert group on social inequalities in health appointed by the Norwegian Directorate for Health, and Olle Lundberg is one of its ten members.

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Sure Start Local Programmes in England

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A cornerstone of the UK Government’s drive to tackle child poverty and social exclusion of children in deprived areas, Sure Start Local Programmes (SSLPs), has been in operation for almost a decade.¹ SSLPs are area-based interventions to improve services for young people and their families in deprived communities with the aim of promoting health and development and reducing inequalities. Services are provided by a partnership of health, education, social services, and voluntary sectors.

Edward Melhuish and colleagues, in today’s *Lancet*, present their findings from a second-phase evaluation of SSLPs.² These researchers used a quasi-experimental observation study to compare over 5800 children aged 3 years and their families from 93 disadvantaged SSLP

areas and over 1800 children of the same age and their families from 72 similarly deprived areas in England. Although the first-phase evaluation³ had indicated small positive and negative effects, the authors now report several beneficial, and almost no negative, effects of the programme in children and families in SSLP areas. Families in those areas used more services for supporting child and family development than did non-SSLP families, showed less negative parenting, and provided a better home-learning environment. Children in SSLP areas showed better social development, more positive social behaviour, and greater independence than did those in non-SSLP areas. The new findings suggest that these initiatives are now, as the authors argue, moving in the right direction.

However, that conclusion is, I feel, subject to some reservation. Without having an inbuilt plan for evaluation, the Sure Start initiative presented considerable challenges in any assessment of its effectiveness. The Department for Children, Schools and Families, which funded the research, ruled out a randomised trial. It can be argued that the considerable alterations to the aims and content of SSLPs, over a fairly brief time, would have hampered any randomised trial. Nevertheless such a trial remains the preferred evaluation methodology. Without a randomised trial, Melhuish and colleagues had to use a quasi-experimental design in which children and families in SSLP areas were compared with those enrolled in the Millennium Cohort Study.⁴

Melhuish and colleagues clearly present the limitations of the study design and provide carefully considered discussion of how, and how far, such limitations can be overcome. Some of the issues, such as sample reliability, are insoluble. Among the 9-month-old children and their families in SSLP areas randomly selected for enrolment in the study, the response rate was 84.4%. Were the non-responders equally, or perhaps even more, in need of services?

Attempts to address some of the other problems provide only limited reassurance. Separate research teams collected data from the SSLP families and from the control families; the SSLP data were gathered on average 2 years later. Although efforts were made to coordinate many methods and measurements between the two teams, and whether the timing differences affected results was analysed, it is difficult to be entirely confident about data quality.

A greater concern, though, is that even if one accepts the research findings, what do they mean? The five outcomes which highlighted positive SSLP effects were based on broad psychometric measures, as described in table 1 of Melhuish and colleagues' paper. There is some tension, at least, between findings from these measures and those from the more specific indicators which the team also collected. The greater use of services by SSLP families did not apparently translate into higher rates of child immunisation or into lower levels of smoking or obesity in SSLP mothers, despite the considerable efforts health workers have devoted to these issues in recent years. Similarly, the better home-learning environment achieved by SSLP families did not lead to improved British Ability Scale Naming



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Vocabulary scores in their children. It is impossible to be sure whether the qualitative measures reflect genuine first steps towards longer-term behavioural change.

Behavioural change is fundamental to the long-term aim of the SSLP initiative: to break the intergenerational transmission of inequalities in health, poverty, school failure, and social exclusion. Change, of the type and scale required, will take at least a generation fully to manifest itself, and it will not be possible to assess the overall success or otherwise of SSLPs before then. Outcomes so far are too ambiguous for major national policy implications to have become apparent.

But the story to date reinforces some basic policy considerations. One or more pilot studies before the SSLPs were launched might have contributed to a clearer focus during the initiative's first years, and so have minimised ill-directed funds and effort. More recent changes, in which the SSLPs have shifted to become Children's Centres under children's trusts run by local authorities,⁵ have further amended the programmes' focus. Such frequent re-ordering of priorities and targets demands careful monitoring; as do the large financial and human investments which have gone into the programmes. The rejection of a randomised trial has made interim evaluations difficult and—despite the sophisticated efforts of the current team—less comprehensive than they could or should be.

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I declare that I have no conflict of interest.

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Can we eliminate inequalities in coronary disease? Absolutely

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The best way to eliminate inequalities in coronary disease is to eliminate coronary disease. In an important paper in today's *Lancet*, Mika Kivimäki and colleagues show that best-practice interventions on four classic risk factors—smoking, cholesterol, blood pressure, and diabetes—would go a long way towards this goal.¹

A socioeconomic gradient in coronary mortality is the norm in high-income countries, and increasingly in low-income and middle-income countries as well.² As summarised by Kivimäki and colleagues, previous studies suggested that the classic risk factors explain only a small fraction of this social gradient.¹ However, as Kivimäki and colleagues point out, these analyses simply standardised the risk-factor distributions of each social group to that of the whole population. The likely effect of best-practice interventions on coronary disease inequalities, in absolute and relative terms, has not previously been estimated.

To answer this important question, Kivimäki and colleagues analysed the Whitehall cohort of British civil servants in which 17 000 men, classified by civil-service grade, were followed up for coronary mortality over 15 years. As expected, low-status men had worse risk-factor levels—except for cholesterol—and higher coronary mortality than their high-status counterparts. Next, Kivimäki modelled what would have happened to coronary mortality had participants experienced either best-practice intervention or primordial prevention (lifelong optimum risk-factor levels). Best practice was defined as average reductions of 2 mmol/L in cholesterol, 10 mm Hg in systolic blood pressure, 1 mmol/L in blood glucose in individuals defined as pre-diabetic, a halving in prevalence of type 2 diabetes, and all smokers quitting.

According to this model, best-practice intervention would reduce the age-standardised 15-year rate difference in coronary mortality (comparing low-status with high-status groups) from 3.5 to 1.1 per 100 (figure). That is, absolute inequality would be reduced by 69%. This estimated reduction falls to 55% if only half of the smokers quit and increases to 86% under the primordial prevention scenario. The modelled effect on relative inequality was lower: under the best-practice scenario, the coronary mortality rate ratio was only reduced by 30%.

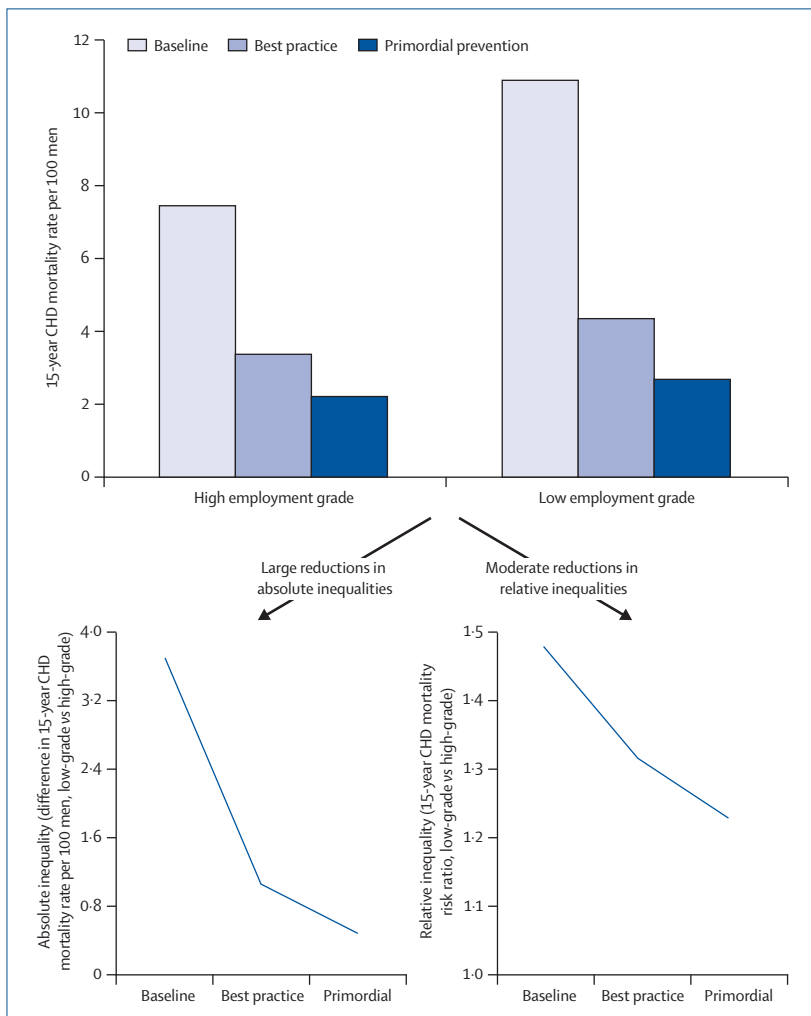


Figure: Modelled effect of intervention on coronary mortality, by social status
CHD=coronary heart disease. 15-year CHD mortality risks adjusted to age 55 years. Derived from reference 1.